TECH-ROD 117

I. DESCRIPTION: Tech-Rod 117 is a covered electrode which is used for welding of nickel-chromium-cobalt-molybdenum alloys (UNS Number N06617). This electrode can also be used for overlay cladding where similar alloy is required. Weld metal provides optimum strength and oxidation resistance above 1500˚up to 2100˚F, especially when welding on base metals of nickel-iron-chromium alloys.

II. APPROVALS: Manufactured under Quality System approved by ASME, ISO9001. Meets AWS A5.1, Class ENiCrCoMo-1.

III. CHEMICAL COMPOSITION

Carbon	.06
Manganese	.45
Silicon	.35
Iron	1.5
Sulfur	.005
Phosphorus	.012
Chromium	21.65
Molybdenum	8.8
Cobalt	11.85
Aluminum	.65
Titanium	.1
Nickel	Balance

MECHANICAL PROPERTIES

Tensile Strength
110,000 PSI 760 MPA

Yield Strength
87,000 PSI 600 MPA

Elongation 26%

Impact Strength
60 ft. lbs.

IV. WELDING PARAMETERS

Direct Current
Electrode + Ve

AMPERAGES:

3/32”	65-75
1/8”	90-105
5/32”	120-135
3/16”	135-155

(For vertical welding amperages are to be reduced by 10 to 15 amps)

V. PACKAGES AVAILABLE:

3/16”-10# can**, 5/32”–**10# can**, 1/8”–**10# Can**, 3/32–**8# can